

## CLAIMS

We claim:

- 5     1)     A method of inhibiting the proliferation of a eukaryotic cell whose growth is stimulated by  $\beta$ -catenin-mediated gene transcription, comprising contacting said cell with:
- a) a non-endogenous source of RXR nuclear receptor protein, and
- b) a therapeutically effective amount of an agonist of said RXR protein.
- 10     2) The method of claim 1 wherein said RXR agonist is not an agonist of an RAR nuclear receptor.
- 3) The method of claim 2 wherein said RXR protein is an RXR $\alpha$  protein.
- 15     4) The method of claim 1 wherein said RXR protein is expressed within said cell by an expression vector.
- 5) The method of claim 4 wherein said expression vector is a viral expression
- 20     vector.
- 6) The method of claim 5 wherein said expression vector is selected from the group consisting of an adenovirus-derived expression vector, an adeno associated virus-derived expression vector and a retrovirus –derived expression
- 25     vector.

- 7) The method of claim 6 wherein said expression vector is an adenovirus-derived expression vector.
- 8) The method of claim 4 in which said expression vector is injected into said cell.
- 5 9) The method of claim 1 in which said cell is a colon cell and said non-endogenous source of RXR protein is provided to said cell by means of oral or rectal administration.
- 10 10) The method of claim 9 in which said RXR ligand is contacted with said cell by systemic administration.
- 11) The method of claim 1 wherein said cell is a cancer cell.
- 15 12) The method of claim 11 wherein said cancer cell is a colon cancer cell.
- 13) A method for determining whether a test compound is an RXR agonist comprising administering said test compound to a cell which expresses RXR and  $\beta$ -catenin, and determining whether  $\beta$ -catenin is degraded in response to the addition of said test compound, wherein the degradation of said  $\beta$ -catenin indicates that said test compound is an RXR agonist.
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